Ethylene Oxide: Technical Reviews and Outreach to Potentially Affected Communities

B. Braun Medical, Inc., Allentown, PA

Final Report – December 2022

As EPA pursues its mission to protect public health and the environment, addressing ethylene oxide remains a major priority for the Agency. EPA's National Air Toxics Assessment (NATA), released in August 2018, identified a number of areas of the country where risks of cancer were potentially elevated because of ethylene oxide (EtO) emissions. NATA estimated risk based on emissions from 2014, which were the most recently available at the time.

NATA is a screening-level analysis that is intended to identify pollutants or areas for closer examination. Because of this, additional work is needed to better understand emissions in areas that NATA identified as potentially having elevated risk. EPA has been supporting its state air agency partners as they conduct that work and identify opportunities for reducing EtO emissions from individual facilities, while the Agency reviews its national regulations for industrial facilities that emit EtO. Actual risks today may be higher or lower than NATA estimated due to several factors, including updated or more refined facility emissions information, or recent facility changes such as the installation of pollution controls.

The information below describes the status of EPA's work on the B. Braun Medical, Inc. facility in Allentown, Pennsylvania. EPA is providing this information, in part, in response to the EPA Office of Inspector General's March 31, 2020, Management Alert which called on EPA to provide information to the 25 communities that NATA identified as potentially having the highest risk from EtO emissions.

Note: For commercial sterilizers, as part of its work to develop a proposed revision for the National Emissions Standards for Hazardous Air Pollutants for EtO sterilization facilities, EPA is compiling more current and complete emissions data to generate new risk estimates for ethylene oxide sterilizers across the country. EPA will share this information, which will include refined risk estimates at the census block level, with the public as part of its upcoming proposed rule.

Outreach update:

On December 1, 2022, EPA conducted a community outreach meeting in Allentown, Pennsylvania. EPA representatives provided a brief presentation to meeting participants that included estimated public health risks from EtO in the Allentown community and EPA's plans to address EtO emissions and risks through an upcoming rulemaking. EPA representatives responded to community members' questions and concerns during the meeting.